

**REMARKS**

Claims 1-31 are pending in this application. Claims 1, 2, 12 and 13 are independent claims. By this amendment, claims 1, 2, 12 and 13 are amended for clarity.

Reconsideration in view of the above amendments and following remarks is respectfully solicited.

The Claims Define Patentable Subject Matter

The Office Action makes the following rejections: **(1)** claims 1, 3, 5, 12, 14, 16, 20, 24, 26 and 30 are rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,529,370 to Kamishima (hereafter Kamishima); **(2)** claims 18 and 22 are rejected under 35 U.S.C. §103(a) as being unpatentable over Kamishima; and **(3)** claims 2, 4, 6-11, 13-15, 17, 19, 21, 23, 25, 27-29 and 31 are rejected under 35 U.S.C. §103(a) as being unpatentable over Kamishima in view of U.S. Patent No. 5,768,094 to Merkel (hereafter Merkel).

These rejections are respectfully traversed.

Applicants respectfully submits that the cited art, either alone or in combination with each other, fails to teach or suggest each and every feature as set forth in the claimed invention.

The Claims Fail to be Anticipated by Kamishima

Applicants respectfully submit that Kamishima fails to teach or suggest each and every feature as set forth in the claimed invention as set forth in independent claims 1 and 12.

The Examiner alleges that Kamishima teaches a keyboard slide mechanism having a rotary member 25c (Kamishima, Fig. 6),

converting mean 31 which includes a movement magnifying means 25b, 26 securing to a sliding member 3 so as to raise or lower the key tops 2. (see Office Action, page 2).

However, Kamishima merely discloses that the cylinder 25 has a groove 25b formed through a wall of the cylindrical body 25a. In Kamishima, the cylinder 25 is rotationally attached to pivot shaft 25c. Furthermore, Kamishima discloses a slider 26, which includes a pin 26a and a slider block 26c, that is cylindrically shaped so as to be loosely received inside the cylinder 25. In Kamishima, the pin 26a of the slider 26 engages the cam groove 25b of cylinder 25 to transmit the motion of cylinder 25 to slider 26.

In contrast to Kamishima, in the present invention an interlocked cam portion 5 includes cams 13, 14 and 8. In the present invention, cylindrical cam 8 is penetrated by the shaft 12 so as to be located at the center, cylindrical cam 13 is engaged with the shaft so as to be fixed at the left, and cylindrical cam 14 is engaged with the shaft so as to be fixed at the right. Cam 13 and 14 are individually fixed to the shaft 12. Thus, as the shaft 12 rotates, the cams 13 and 14 rotate together, but cam 8 is freely movable in both the rotating and sliding directions and does not directly rotate together with the shaft 12. (see present specification, page 6, paragraph [0019]).

In other words, in the present invention a totally different type of cam arrangement is being used to convert the rotating movement of the shaft into translating movement. For example, Kamishima merely attaches a cylinder 25 with a groove 25b to a shaft 25c and a slider 26 is loosely received inside of the cylinder 25. (see Kamishima, col. 7, line 66 to col. 8, line 25). As such

Kamishima fails to disclose the same cam arrangement (i.e., cams 13, 14 and 8) as shown in the present invention. For example, in independent claims 1, 2, 12 and 13, the converting means includes at least two cams arranged on the rotary member in contact with each other.

The office Action alleges that claims 8-11, which highlight the cams interaction with each other, are taught by Kamishima in Figs. 6 and 7. Applicants also strongly disagree with the allegations pertaining to claims 8-11. Applicants believe that even if Kamishima discloses that cylinder 25 rotates with shaft 25c, Kamishima fails to teach that the second cam, i.e., cam 26, is arranged on a rotation shaft of the rotary member with the first cam 25. Instead, cam 26 of Kamishima is merely accommodated inside cylinder 25 and the follower 26 of cam 26 is arranged in the groove 25b. As such, Kamishima's cam 26 is not arranged on the rotation shaft. In Kamishima, only cylinder 25 appears to be arranged on the rotation shaft.

Again, in independent claims 1, 2, 12 and 13 of the present application, the converting means includes at least two cams arranged on the rotary member in contact with each other.

According to Kamishima's invention, the sliding movement of the angle plate 27 is stabilized by a guiding function realized with a slider block 26c and a guide groove 34 that guides the sliding of the slider block 26c (this function serves to stabilize the sliding movement in the horizontal and vertical directions). In other words, according to Kamishima, when consideration is given to deviations in the arrangement of components that are inevitable when the product is actually manufactured and assembled (i.e.,

designing- and manufacturing- associated deviations) and similar factors, to stabilize the sliding movement of the angle plate 27, it is essential to use, in addition to the cam mechanism (movement converting means) constituted by the combination of the cam groove 25b and the follower 26a, components that correspond to the slider block 26c and the guide groove 34 that guides the sliding of the slider block 26c.

In contrast to Kamishima, in the present invention a function the cam mechanism (movement converting means) is realized with an at least two-cam arrangement. In other words, in realizing a keyboard slide mechanism with stable sliding movement, the cam mechanism (movement converting means) realized with the at least two-cam arrangement according to the present invention is more advantageous in making the keyboard slide mechanism more slimmer than the cam mechanism (movement converting means) according to Kamishima. This advantage results from the fact that the contact area between the cams 8 and 13 or between the cams 8 and 14 in the present invention is larger than the contact area between the cam groove 25b and the follower 26b in Kamishima.

According to MPEP §2131, "a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. Of California*, 814 F.2d 628, 631, 2 USPQ2d 1051 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ...claims." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913 (Fed. Cir. 1989). The elements must be arranged as required by the claims, but this is not an *ipsissimis*

*verbis* test, i.e., identity of terminology is not required. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 ( Fed. Cir. 1990).

Applicants respectfully submit that the Office Action has failed to establish the required *prima facie* case of anticipation because the cited reference, Kamishima, fails to teach or suggest each and every feature as set forth in the claimed invention.

Applicants respectfully submit that independent claims 1 and 12 are allowable over Kamishima for at least the reasons noted above.

As for each of the dependent claims not particularly discussed above, these claims are also allowable for at least the reasons set forth above regarding their corresponding independent claims, and/or for the further features claimed therein.

Accordingly, withdrawal of the rejection of claims 1, 3, 5, 12, 14, 16, 20, 24, 26 and 30 under 35 U.S.C. §102(e) is respectfully solicited.

#### The Claims Fail to be Obvious

Applicants also respectfully submit that Merket fails to make up for the deficiencies found in Kamishima.

To establish a *prima facie* case of Obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the

claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP 706.02(j).

Applicants respectfully submit that not only does Kamishima fails to teach or suggest each and every feature as set forth in the claimed invention, but the claimed invention fails to be obvious over Kamishima, either alone or in combination with Merket.

Applicants respectfully submit that Merkel fails to make up for the deficiencies found in Kamishima noted above. Like Kamishima, Merkel fails to teach the cam arrangement as set forth the claimed invention. In addition, the Examiner appears to make rather broad assertions pertaining to the predetermined angle of the lid and the formula pertaining thereto without providing any concrete evidence of his position.

As such, applicants respectfully request that the Examiner provide evidence to back up his allegations that "the predetermined angle can result in anything other than an approximation which will be more or less accurate for any given person." (see Office Action page 3). Otherwise, withdrawal of the rejection under these grounds are respectfully requested.

Applicants respectfully submit that not only does the references fail to teach or suggest each and every feature as set forth in the claimed invention, but that one of ordinary skill in the art would not have been motivated to combine/modify the teachings of Kamishima with Merket to arrive at the claimed invention because there is no teaching or suggestion in any of the

references regarding how or why one would modify such systems to arrive at the claimed invention.

Applicants respectfully submit that independent claims 1, 2, 12 and 13 are all allowable over Kamishima, either alone or in combination with Merket for at least the reasons noted above.

As for each of the dependent claims not particularly discussed above, these claims are also allowable for at least the reasons set forth above regarding their corresponding independent claims, and/or for the further features claimed therein.

Accordingly, withdrawal of the rejection of claims 2, 4, 6-11, 13-15, 17-19, 21-23, 25 and 27-29 under 35 U.S.C. §103(a) is respectfully requested.

#### Conclusion

In view of the foregoing, Applicants respectfully submit that the application is in condition for allowance. Favorable reconsideration and prompt allowance are earnestly solicited.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact Carolyn T. Baumgardner (Reg. No. 41,345) at (703) 205-8000 to schedule a Personal Interview.

Appl. No.: 10/090,732  
Docket No.: 2936-0150P  
Reply to Office Action of October 7, 2003


If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment from or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. \$1.16 or under 37 C.F.R. \$1.17; particularly, the extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASH & BIRCH, LLP

By   
Terrell C. Birch, #19,382

P.O. Box 747  
Falls Church, VA 22040-0747  
(703) 205-8000

  
TCB/CTB/mpe  
2936-0150P